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I.

AN ACCOUNT OF THE DISEASE OCCASIONED BY DRINKING COLD WATER IN WARM WEATHER, AND THE METHOD OF CURING IT.

WE offered last week some very sage and practical observations by the late Dr. Rush, on pulmonary consumption. Though not new to our readers, they so abounded with doctrines which the practice of the present day is confirming, that it was thought advisable to reprint them in the Journal. A like liberty is taken today, in offering the sentiments of the same preeminent practitioner on the symptoms and treatment of an affection frequently met with at this season of the year.

Few summers elapse in Philadelphia, in which there are not instances of many persons being diseased by drinking cold water. In some seasons, four or five persons have died suddenly from this cause, in one day. This mortality falls chiefly upon the laboring part of the community, who seek to allay their thirst by drinking the water from the pumps in the streets, and who are too impatient, or too ignorant, to use the necessary precautions for preventing its morbid or deadly effects upon them. These accidents seldom happen, except when the mercury rises above 85 deg. in Fahrenheit's thermometer.

Three circumstances generally concur to produce disease or death from drinking cold water. 1. The patient is extremely warm. 2. The water is extremely cold. 3. A large quantity of it is suddenly taken into the body. The danger from drinking the cold water is always in proportion to the degrees of combination which occur in the three circumstances that have been mentioned.

The following symptoms generally follow where cold water has been taken, under the above circumstances, into the body :—

In a few minutes after the patient has swallowed the water, he is affected by a dimness of sight ; he staggers in attempting to walk, and, unless supported, falls to the ground ; he breathes with difficulty ; a rattling is heard in his throat ; his nostrils and cheeks expand and contract in every act of respiration ; his face appears suffused with blood, and of a livid color ; his extremities become cold, and his pulse imperceptible ; and, unless relief be speedily obtained, the disease terminates in death, in four or five minutes.

This description includes only the less common cases of the effects of drinking a large quantity of cold water, when the body is preternaturally heated. More frequently, patients are seized with acute spasms in the breast and

stomach. These spasms are so painful as to produce syncope, and even asphyxia. They are sometimes of the tonic, but more frequently of the clonic kind. In the intervals of the spasms, the patient appears to be perfectly well. The intervals between each spasm become longer or shorter, according as the disease tends to life or death.

It may not be improper to take notice that punch, beer, and even toddy, when drunken under the same circumstances as cold water, have all been known to produce the same morbid and fatal effects.

I know of but one certain remedy for this disease, and that is LIQUID LAUDANUM. The doses of it, as in other cases of spasm, should be proportioned to the violence of the disease. From a teaspoonful to near a tablespoonful have been given, in some instances, before relief has been obtained. Where the powers of life appear to be suddenly suspended, the same remedies should be used which have been so successfully employed in recovering persons supposed to be dead from drowning.

Care should be taken, in every case of disease or apparent death from drinking cold water, to prevent the patient's suffering from being surrounded, or even attended by too many people.

Persons who have been recovered from the immediate danger which attends this disease, are sometimes affected, after it, by inflammations and obstructions in the breast or liver. These generally yield to the usual remedies which are administered in those complaints, when they arise from other causes.

If neither the voice of reason, nor the fatal examples of those

who have perished from this cause, are sufficient to produce restraint in drinking a *large* quantity of *cold* liquors when the body is *preternaturally* heated, then let me advise to,

1. Grasp the vessel out of which you are about to drink, for a minute or longer, with both your hands. This will abstract a portion of heat from the body, and impart it at the same time to the cold liquor, provided the vessel be made of metal, glass, or earth; for heat follows the same laws, in many instances, in passing through bodies, with regard to its relative velocity, which we observe to take place in electricity.

2. If you are not furnished with a cup, and are obliged to drink by bringing your mouth in contact with the stream which issues from a pump, or a spring, always wash your hands and face, previously to your drinking, with a little of the cold water. By receiving the shock of the water first upon those parts of the body, a portion of its heat is conveyed away, and the vital parts are thereby defended from the action of the cold.

By the use of these preventives, inculcated by advertisements pasted upon pumps by the Humane Society, death from drinking cold water has become a rare occurrence, for many years past, in Philadelphia.

II.

ON THE DISEASES OF CHILDREN. BY MR. MARLEY.*

MR. MARLEY, though a young surgeon, appears to be an attentive observer, and a judicious practitioner. It is perhaps to be regretted that he

* From the Medico-Chirurg. Review.

has ushered himself so early on the stage of professional literature. Medical knowledge, like wine, gains by keeping. Gross errors fall to the bottom, and the lighter ones float on the top, so that both may be separated from the purified fluid between. We do not address this remark to the author of the present work in particular, but to our junior brethren generally. It will not be attended to, and therefore we shall not press the subject farther. We shall glance at some of the sections in this volume, by way of offering our readers some specimens of the performance.

Practical Remarks on the Use of Opium.

"In children laboring under severe abdominal pain from an irritable state of the intestinal canal, we often find an appropriate dose of opium (it will be understood that I mean any of its preparations), given either in form of draught or enema, produce beneficial and speedy relief. The surface, which was before dry and parched, becomes moist, and is succeeded by a gradual cessation of pain, and probably by a sound and undisturbed sleep. But this picture is sometimes reversed; for, instead of being quieted, the child will start up suddenly, screaming out as if frightened, or he will moan during a restless and imperfect slumber. When opiates produce the latter train of symptoms, I have generally observed, that, on the occurrence of slight diaphoresis, the patient becomes tranquillised, and a calm and quiet sleep will often follow. The warm bath will be found of great utility, by producing slight moisture on the

surface, and should therefore be employed with that view.

"The power of opiates in allaying irritation, is probably nowhere more marked and efficacious, than in excessive evacuations from the bowels. In such cases, it is in general best to exhibit it in the form of enema; but even in this form caution should guide us in its use. In one instance I have known an injection, containing a very small quantity of laudanum, produce great cerebral excitement, extreme thirst, and vomiting.

"In those cases of excitement arising from nervous irritability, its well-timed use will often prove decisive. After bleeding in inflammation of the bowels, opiates will often be found of great use, and should be exhibited per anum. In colic pains they prove highly efficacious, and should never be neglected."

Mr. M. properly considers opium as contraindicated in affections of the lungs, where there is dry cough and quick pulse; also in all cases of increased action of the brain or its membranes. The author conceives that "the lives of many children are annually sacrificed by the indiscriminate and improper use of opiates." He instances some cases where mischief was produced by the exhibition of opium to children, and indeed such instances are by no means rare, especially where quack medicines are employed. In truth, there is rarely any necessity for the exhibition of opiates to children, excepting in some severe bowel complaints, and then they should be in the form of Dover's powder, or other medicines that determine to the skin, and alternated with castor

oil, or other mild laxative. The diseases of children are almost all of an inflammatory character ; and the removal of inflammatory action by proper depletion is the best mode of conquering excitement.

Local and General Bleeding.

Under this head, Mr. Marley has made some judicious remarks. In all cases of internal inflammation, of a serious character, he advises general bleeding in children,—from the arm in visceral phlogosis,—from the external jugular, or from the temporal artery, in cerebral inflammation. Mr. M. has seldom found any difficulty in opening the jugular vein, however young the child ; but in infants under twelve or fifteen months, it is often difficult to open the veins of the arm. By immersing the member in warm water, the facility of the operation is increased. When these measures are not adopted, or not deemed advisable, he recommends cupping in preference to leeches. His objections to leeches are urged, we think, too strongly ; and the great preference of cupping is not very consistent with the following passage :—

“ I have known considerable nervous excitement produced in children by cupping (particularly on the chest), and occasionally even in adults. I have likewise known extensive local inflammation produced by this operation, but I have never known it end in suppuration.”

We have often seen the blaze of the spirit, the pressure of the glass, and the stroke of the scarificator, occasion a wince in men of strong minds ; and we cannot reconcile to our minds this lavish

praise and recommendation of cupping in cases of infantile disease. In children, the feelings are everything, and the reasoning powers nothing. We have seen the application of cupping-glasses induce instant convulsions, and such a prejudice excited against a practitioner in the minds of the parents, that he was never afterwards employed in the same family. The feelings of the community are not to be outraged or trifled with ; and especially when we are urging measures that are really not more effectual, though far more unpalatable, than others of a milder character. Nothing is more common than to see practitioners who are deficient of tact and discretion, ordering a poor person, who can scarcely procure bread for his family, to give half a guinea to a cupper, when half a dozen of leeches, costing a couple of shillings, would be equally beneficial, and much less formidable.

Croup.

So much does Mr. Marley dread this disease, that whenever he meets with a “ child laboring under cold, if it be accompanied by a dry hoarse cough, with pain and difficulty of breathing, he very generally has recourse to the measures used for croup,—namely, abstraction of blood from the jugular vein, an emetic, and then a dose of calomel. To this practice in real croup, we do not object ; but whether the emetic plan is the most proper for a sharp attack of pulmonic inflammation, we have some doubts.

More than a third of the volume is occupied with the subject of cutaneous diseases, and the execution of the whole is respectable.

Mr. Marley's remarks are almost entirely practical, being founded on observations made at the bedside of sickness, rather than drawn from books. This is perhaps the best recommendation of the work.

III.

DUPUYTREN'S TREATMENT OF SCROFULA.

THE following note, says the same Review, respecting the above celebrated surgeon's method of treatment in scrofulous affections, was communicated by Professor Guilbert to M. Ratier, for the third edition of his work on the Parisian Hospitals, recently translated by Dr. McLellan.

"The treatment employed by M. Dupuytren in scrofula differs much from the methods of treatment generally followed, and is the result of observations, anatomical and physiological, on the nature and progress of that disease.

"Whatever be its varieties or its seat, scrofula exhibits three distinct periods in its march. In the first, the disease is in some measure inert, manifesting itself only through the characters proper to the lymphatic constitution, and by an interruption, more or less difficult to perceive, in the action of the parts affected. In this first period, M. Dupuytren employs all the means afforded by the *hygiene* suited to fortify the constitution, and, by consequence, effect the resolution of the disease. He is careful, moreover, to avoid everything that might irritate, agitate, or heat,—as elixirs, antiscorbutic syrups, and other spirituous medicines,—which he believes are

calculated to make the disease pass from the inert into the inflammatory state.

"It is especially in the second state of the disease, marked always by excitement, fever, local pains, swelling, and sanguineous exhalations, that he sedulously shuns those stimulating remedies, which, from the abuse made of them for many years, have produced more evil than the disease itself they professed to ameliorate.

"In this second period of the malady, M. Dupuytren, without regard to its supposed nature, treats it as an inflammatory affection, by bleeding, leeches, and diet, and by so doing has often arrested its progress, and prevented its melancholy consequences, such as caries of the bones, gibbosities, spontaneous luxations, suppuration, and destruction of the organs. If suppuration be established, and its products escape by an external outlet, and if the disease have returned to that almost inert state which constitutes its first period, he resumes the use of the means calculated to strengthen the system, but is still careful to reject everything that would excite, or have a tendency to cause, insomnia or fever. For the same reason, he abstains, in the third period of the disease, from the use of vinous, alcoholic, or alkaline preparations. As a substitute for such, he prescribes only the purely aqueous preparations of cinchona, gentian, or simarouba; persuaded that they contain all that is really tonic in these substances, and are free from the irritating properties contained both in the base and vehicle of the ordinary remedies. He thus

employs the aqueous infusions, and syrup of gentian, cinchona, and simarouba, to which he gives more or less strength, according to the age and sex of the individual, or the seat and character of the affection."

IV.

HISTORY OF A SUCCESSFUL CASE OF CÆSAREAN OPERATION.

THIS operation was performed by Dr. John L. Richmond, of Newton, Ohio, and reported by him in the *Western Journal* for last April.

On the 22d of April, 1827, I was called to visit a Miss E. C. in labor; on my arrival at the house, I found she had been in labor about thirty hours. Two midwives had been called, but neither of them could give any account of the case, except that "she had fits, and the pains did no good."

On examination, I found that the os externum had suffered no dilatation, and there was no fetal tumor in the pelvis, except when the pain was on, when there was a kind of pressing down of the uterus and the contents of the pelvis. The uterus presented a smooth tumor towards the superior extremity of the vagina, which seemed only to be felt through the anterior part of the vagina, and the anterior part appeared to form an acute angle with the posterior, immediately in the hollow of the sacrum, and a little posterior to the tumor.

She lay, by spells, comparatively easy; when her pains came on, they continued for a short space of time, nearly regular or natural, but in twenty or thirty

seconds were transferred to the stomach, and immediately terminated in general convulsions, which continued from three to five minutes, and were succeeded by alarming faintings, which lasted from ten to twenty minutes. The system was much exhausted, the pulse depressed, and not the least advantage had yet resulted from all she had suffered.

My first object was, to prevent the convulsions and to recruit the system; for which purpose I gave laudanum and sulphuric ether, and applied flannel wet with hot spirits to the feet. These measures produced considerable mitigation of the convulsions, but the fainting increased. I had no recourse to cordials, for these could not be obtained. I was seven miles from home, and had but few medicines with me. I spent four hours in fruitless attempts, either to recruit my patient, or to ascertain the exact condition of the mother or the presentation of the child. The vagina seemed a kind of sack, the extremity of which could easily be reached with the finger, but nothing like a uterus could be felt, except a tumor above, which was felt through the vagina. Under these circumstances, finding my patient fast sinking, I requested advice, which, however, could not be obtained, on account of high water in the little Miami, and the darkness of the night.

I informed the patient and her friends of the only means by which I could conceive of relief: this was at once consented to, as affording some hopes of life.

After doing all in my power for her preservation, and feeling myself entirely in the dark as to her situation, and finding that whate-

ver was done must be done soon, and feeling a deep and solemn sense of my responsibility, with only a case of common pocket instruments, about one o'clock at night, I commenced the CÆSAREAN SECTION.—Here I must take the liberty to digress from my subject, and relate the condition of the house, which was made of logs that were green, and put together not more than a week before. The crevices were not chinked; there was no chimney, nor chamber floor. The night was stormy and windy, inasmuch that the assistants had to hold blankets to keep the candles from being blown out. Under these circumstances, it is hard to conceive of the state of my feelings, when I was convinced that the patient must die, or the operation be performed.

I commenced the operation, by making an incision through the integuments down to the *linea alba*, from the umbilicus, to within an inch and a half of the pubis. I then made a short incision through the tendon, about one third of the way from the lower extremity of the other, and introducing my finger, I found that the omentum was much in the way, as she was very fat. I introduced the blade of a crooked pair of scissors, and, crowding the omentum up with my fingers, cut first up and then down. During this part of the operation, the hemorrhage was very trifling; I presume not exceeding four or five ounces.

As soon as the tension of the abdominal muscles was taken off, the convulsions subsided, and the patient became composed and tranquil. The uterus then presenting, I proceeded to divide it in the same manner as I had done

the *linea alba*. I made the incision, from as low down as I could, to near the fundus uteri: the incision passed immediately over the placenta. This incision produced considerable hemorrhage, which however soon partially subsided, and I then divided the placenta by making a small incision in it, and then lacerating it, which I thought would occasion less hemorrhage than to cut the whole of it. I then suffered all the blood to escape that I could, while the whole cavity of the abdomen was filled, and wiped away all I could, before trying to remove the child.

The child lay with the back presenting to the incision, the head resting on the superior strait of the pelvis. The uterus and placenta being thus divided, the contractions of the former were rapid, and the latter soon became entirely detached. As soon as the gush of blood partially subsided, I commenced my efforts to remove the child; but, as it was uncommonly large, and the mother very fat, and having no assistance, I found this part of my operation more difficult than I had anticipated. My first endeavor was to raise the child sufficiently towards the stomach, to bring the head from under the pubis; but this I was unable to do by any force which appeared to me safe to exert. I then made several vain attempts to raise the breech; after which I endeavored to pass my hand around the child, and get hold of the feet; but this the patient could not endure: and thinking the danger of the mother very great, and believing or supposing that the child was dead, from the detachment of the placenta, and considering, at all

events, that a childless mother was better than a motherless child, I determined to do all I could for the preservation of the mother. Accordingly I made a transverse incision across the back of the fetus, near the upper lumbar vertebra, and the muscles of the back being divided, it formed an angle instead of a curve, by which means I was enabled easily to extract it. The placenta, being entirely detached from the uterus, was at once removed, and the blood carefully wiped out of the uterus, and all the surrounding parts properly cleansed.

I now determined to make, if possible, some discovery in relation to the *orificium uteri*. I accordingly passed my hand into the uterus; and, by examining carefully, I found an aperture which, to the touch, from within, did not seem to bear any resemblance to a natural orifice. I introduced the finger of the other hand into the vagina, and could not bring them into contact with each other; there seemed to be a kind of tube leading from the uterus, to within about three-fourths of an inch of the *meatus urinarius*, into which I could not pass my finger at the upper extremity to any distance, and not at all below. I then dressed the wound in the common manner, with sutures and adhesive straps, leaving about two inches of the lower extremity open.

She now lay perfectly easy, and went to sleep. I kept her in one position for four days, keeping the bowels open with saline purges and injections. The lochial discharge commenced in about eight hours, and continued for five days; some discharge also

occurred from the open part of the incision. That part of the wound which was closed, adhered by the first intention. I suffered her to take no nourishment but weak gruel. On the seventh day, I closed the lower part of the wound; but finding, on the twelfth, that an accumulation had taken place in the cavity of the abdomen, I opened a small orifice, from which a large quantity of black, very offensive blood and water was discharged. I then introduced a female catheter, and, with a pint syringe, threw in three pints of warm water with a small quantity of soap in it, and drew it back with the syringe, after the manner of a stomach pump: this I repeated six successive days, when the water which was injected ceased to be colored, and the orifice was suffered to close. The patient never complained of pain during the whole course of the cure. She commenced work in twenty-four days from the operation, and in the fifth week walked a mile and back the same day.

One circumstance I cannot forbear relating. As I was syringing out the abdomen as above mentioned, a neighboring woman, standing by my side, said to her, "what makes you laugh?" to which she replied, "because it feels so queer." I looked to her face, and she was laughing.

I have made a recent examination of this patient *per vaginam*, and the condition of the vagina remains as above described, only it is now more shallow than it was when the uterus was raised into the abdomen: the whole depth of the vagina is now only two-thirds of a finger's length, and the orifice, or abnormal os

tincæ, would not be discovered by the most minute examiner, who was not apprised of its situation. The anterior coat of the vagina now feels like a kind of septum, passing obliquely upward from before backward, leaving, I think, about one and a half inches between it and the forchet. I should think, if it were possible, that it is an unnaturally situated hymen. Here is as much room

for others to theorise on the physiology of conception as for me. She has been married since, and lived two years with a husband, during which time she tells me that she suffered great inconvenience on account of the shallowness of the vagina, but no conception has taken place. She suffers no inconvenience from the abdominal cicatrix, it being perfectly firm.

BOSTON, TUESDAY, JUNE 8, 1830.

MASSACHUSETTS MEDICAL SOCIETY.

An annual meeting of this Society was held, on Wednesday last, at the Society's rooms in the Atheneum. The usual business having been concluded, the following resolutions were presented by the Recording Secretary, and unanimously adopted by the Society:—

The Fellows of the Massachusetts Medical Society having a deep conviction that a knowledge of Anatomy is essential to the education of a Physician as well as a Surgeon, and being fully convinced that this knowledge can only be obtained by actual dissection of the human body, which is in a great measure prevented by the existing laws of this Commonwealth, do therefore resolve,

1st. That they regard with peculiar satisfaction the remarks of his Excellency the Governor on this subject, in his recent communication to the Legislature, and the appointment of a special committee in relation to this business by the Senate and House of Representatives, and hail them as the harbingers of a more liberal and enlightened policy.

2d. That they will use all proper means in their power to diffuse more

correct information in regard to the necessity of anatomical knowledge than now exists, and to convince their fellow citizens that the members of the medical profession have no interest distinct from that of the community, in their attempts to legalize the study of Anatomy, but that in so doing they are laboring to advance the cause of science and humanity.

3d. That they cordially approve the course that has hitherto been adopted by the Counsellors with the view of advancing the object, and they request them to adopt such other measures as they may deem proper and expedient to accomplish the wishes of the Society.

The following gentlemen were elected Counsellors for the ensuing year:—

For Suffolk—Drs. William Ingalls, John Dixwell, James Jackson, Benj. Shurtleff, John C. Warren, John Randall, Geo. C. Shattuck, John B. Brown, Walter Channing, Jacob Bigelow, George Hayward, Enoch Hale, jr., Solomon D. Townsend, John Ware, Zabdiel B. Adams, David Osgood, Edward Reynolds.

For Essex—Drs. Benj. L. Oliver, James Gardner, Richard Hazeltine, Abel L. Pierson, Andrew Nichols,

Thomas Manning, Samuel Johnson, Joseph Kittredge, Jeremiah Spofford, Richard S. Spofford, E. L. Coffin.

For Middlesex—Drs. Amos Bancroft, Calvin Thomas, Rufus Wyman, Thomas Bucklin, John Warton, Abraham R. Thompson, Zadock Howe, Wm. J. Walker, Timothy Wellington, J. C. Dalton.

For Worcester—Drs. Stephen Batchelder, jr., John Green, Daniel Thurber, Charles W. Wilder, Benj. F. Heywood, Edward Flint, Gustavus D. Peck, Aug. G. Parker.

For Hampshire—Drs. Elihu Dwight, Joseph H. Flint, Alpheus F. Stone, Stephen W. Williams, Levi W. Humphreys, Job Clarke.

For Berkshire—Drs. Henry H. Childs, Robert Worthington, Wm. H. Tyler, Charles Worthington, Royal Fowler, Benjamin Rodgers.

For Norfolk—Drs. Amos Holbrook, Nathaniel Miller, John Bartlett, Robert Thaxter, Samuel Bugbee, Jeremy Stimson, Ebenezer Alden.

For Plymouth—Drs. Nathan Hayward, Hector Orr, Cushing Otis, Andrew Mackie, Ezekiel Thaxter.

For Bristol—Drs. Benj. Billings, Alexander Reed.

For Barnstable—Drs. Joseph Samson, Aaron Cornish.

At one o'clock, the members attended to an Address by Dr. RUFUS WYMAN, on the importance of the study of Mental Philosophy as a part of medical education.

On the subsequent day, the Counsellors made choice unanimously of Dr. JOHN GREEN, of Worcester, to deliver the address at the next annual meeting; a committee of five was appointed to attend to the subject of legalizing the study of anatomy, and the following officers were chosen for the year:—

James Jackson, M.D., *President*.
Amos Holbrook, M.D., *Vice President*.

John Dixwell, M.D., *Cor. Secretary*.
Geo. Hayward, M.D., *Rec. Sec'ry*.
Walter Channing, M.D., *Treasurer*.
Enoch Hale, jr., M.D., *Librarian*.

Censors.

For the 1st District, and for the Society—Drs. John Dixwell, Rufus Wyman, Walter Channing, Geo. Hayward, Enoch Hale, jr.

For the 2d District—Drs. John Green, Benj. F. Heywood, Edward Flint, Charles W. Wilder, Gustavus D. Peck.

For the 3d District—Drs. Elihu Dwight, Joseph H. Flint, Daniel Collins, Elisha Mather, Job Clarke.

For the 4th District—Drs. Alfred Perry, Wm. H. Tyler, Lyndon A. Smith, Hubbard Bartlett, Orren Wright.

EFFECTS OF INSPIRATION OF OXYGEN GAS.

It is well known from the results of experiment, that a determinate quantity of oxygen gas will support animal life for a much longer period than the same amount of atmospheric air; and as the latter, when thus deprived of its vital property, has been found, on analysis, to have had its oxygen converted into carbonic acid, it has been inferred that a similar change occurred in this gas, when respired separately from the other constituents of the atmosphere. Some experiments lately made by Mr. Broughton in London, go to disprove this conclusion, and to show that the gas itself produces, after a certain time, a fatal effect on the animal which breathes it. These experiments show,—1. That animals confined in a limited quantity of oxygen are capable of sustaining life longer than when placed in the same quantity of pure air. 2. That the

effect of this gas on the system is to produce increased rapidity of the circulation. 3. That its chemical influence is manifested by a change in the color of the venous blood, which becomes, like the arterial, of florid red. 4. That the same gas which has proved fatal to the animal confined in it, is still capable not only of supporting combustion, but of renewing flame in a taper which has ceased to blaze. 5. That, under the same circumstances, it will support life in another animal confined in it, for a time nearly equal to that of the previous experiment. 6. That, in animals killed by respiring oxygen, the contractility of the heart and that of the intestinal canal survive the extinction of animal life. 7. That after death from this cause, coagulation takes place with unwonted rapidity. It appears singular that the conclusions here stated, so far as they regard the morbid influence of oxygen on the system when breathed undiluted, should not have been earlier acknowledged as among the settled principles of physiology. It seems, indeed, to have repeatedly occurred to inquirers into this subject, that if the continuance of animal life depended solely on the amount of oxygen furnished to the animal, a given amount of the pure gas ought to sustain it as long as the same quantity when combined in the due proportions, as a constituent of atmospheric air. But, easy as it would seem, by actual observation, to place this point beyond the reach of doubt, it does not appear that the experimentum crucis has ever been fairly performed. Lavoisier made several trials with different animals, and from

the result of these inferred, that, under favorable circumstances, life would continue until the oxygen was exhausted. He states, indeed, that young Guinea pigs, confined in pure oxygen, continued to live and respire with great ease for the space of several days. Subsequent experiments, however, made by Dr. Beddoes, presented conclusions widely different. He found that animals confined in this gas, almost immediately manifested symptoms of distress and dyspnoea. He further observed that when the animal had become exhausted, and was removed, the oxygen was found, on examination, not to have been much impaired in amount or in purity; that where the experiment was not fatal, the system was so much saturated with oxygen, that immersion in water could be sustained for a considerable time without injury; that when death occurred, the lungs and pleura were found inflamed, and the blood coagulable in a remarkable degree.

The attempts to ascertain the effect of the gas on human respiration, were not followed by more uniform and harmonious results. Of those who had the curiosity to breathe it, some declared that it produced an agreeable lightness, and imparted additional animation to the system; others, among whom was Sir H. Davy, found the respiration of it laborious, and were affected, in breathing it, with a sense of tightness across the chest; others again breathed it, or thought they did so, without perceiving its effects to differ from those of atmospheric air.

To reconcile statements thus various and contradictory, or to derive

any certain conclusions from such conflicting evidence, is certainly no easy task. Something, no doubt, was owing to the fact that the various animals subjected to experiment varied much in vigor and in tenacity of life, and something to the difference of purity of the gases employed. After all, however, abundant room remained for doubt and perplexity, and to these the subject seems to have been quietly abandoned by recent physiologists. Dr. Bostock, in his work on respiration, after comparing the various opinions to which we have alluded, concludes merely that we are not entitled to ascribe to oxygen any deleterious influence on the animal system; and Mr. Ellis, who inclines to adopt a different opinion, is satisfied to conclude, generally, "that the atmosphere, as it is naturally composed, is best adapted to the economy of the animal system; but that this system is at the same time so constituted as to be able to bear great variations in the composition of the air, without immediate injury to the powers of animal life."

From this brief view of the previous state of our knowledge on this subject, we return for a moment to Mr. Broughton and his experiments. According to this observer, then, the immediate effects of the respiration of oxygen are, first, an increased irritability of the heart, by which the circulation is rendered more rapid; and secondly, a change in the chemical character of the venous blood, by which it is assimilated in color, and perhaps in other properties, to the arterial. Why these

effects should follow rather than any other, it is not so very obvious. Of the constituents of atmospheric air, oxygen is the only one which is known to be retained by the lungs in ordinary respiration. Sir Humphry Davy indeed thought he had ascertained, by his experiments, that the quantity of nitrogen expired was less, by two-ninety-fifths, than that which was received; but later observations do not confirm this idea. Now it is difficult to understand how the absence of this constituent of the atmosphere can render the blood less susceptible of being carbonized in its passage from the extreme arteries into the veins. The only explanation of this seems to be that the blood is hyperoxygenized, to use the expression, in the lungs, and that this excess of oxygen, having stimulated the heart to increased action, is retained throughout the circulation, and affects the quality and color of the venous blood. The fact, however, that in ordinary respiration not more than one third of the oxygen is retained, as is proved by Davy's experiments, makes even this explanation far from satisfactory. After all, then, we may sum up the subject in the language used ten years since by Dr. Good,—“that, though the researches of modern chemistry have disclosed volumes of facts heretofore unknown, and the ingenuity of able theorists has applied them to a variety of hypotheses, we are still, as regards a systematic acquaintance with this function, as much in the dark as ever; and, after all the time and labor which have been devoted to it, we are still

obliged to confess there is no inquiry, in the whole range of physiology, in a more unsatisfactory and unsettled state."

SURGICAL CAUTION.

THERE is no circumstance which puts more strongly to the test the strength of mind and moral courage of a practitioner, than the urgent entreaty of a patient for the adoption of a remedy or mode of treatment, which the judgment of the physician condemns as useless or injurious. A striking illustration of this truth is contained in an account, given in one of the late French Journals, of a case which occurred in the practice of Pelletan, formerly Surgeon to the Hôtel Dieu at Paris. A man had been long troubled with an ulcer on one of his legs, which was very obstinate, and appeared to be incurable. Wearied at length with the trouble which the disease cost him, he begged the surgeon to amputate the limb. Pelletan refused, represented to him the danger which would attend such a measure, and endeavored to convince him of the folly of his request. He however continued his importunities, until the surgeon allowed his own judgment to be overruled, and consented to amputate. After the operation, the wound for a time appeared to do well, but eventually assumed a gangrenous appearance, and proved fatal. A short time before his death, the man sent for Pelletan, and reproached him bitterly for having yielded to his entreaties. The scene, as might be supposed, made a deep and lasting impression on this indi-

vidual, who often repeated the story afterwards as a warning to others.

With regard to the course pursued in this case, we presume there can be but one opinion. The surgeon was not justified, for the gratification of a whim, in subjecting a patient to a hazardous operation, when the case itself was not a dangerous one. Cases will occur, however, in the practice of every one, where the course of rectitude is by no means so evident, and in which much sound discretion must be exercised in order to proceed rightly. It is certain that desperate cases require desperate remedies; and it is equally so, that, in emergencies of great doubt and difficulty, a trifling circumstance will sometimes justly be allowed to determine the choice of measures: but so long as the course of duty is plain, the physician who has a just sense of his responsibility will not allow himself to be turned from it, either by the wilfulness of a patient, or the remonstrances of misjudging friends.

AMERICAN MEDICAL LIBRARY.

A PROSPECTUS has been published at Philadelphia, by James Webster, of a work which is to bear the above title, and which is to consist of abridgments or analyses of the writings of the most distinguished ancient and modern authors in Medicine and Surgery. The names of the gentlemen concerned in this work are not mentioned in the circular we have received, and it is so evident that the value of such a library must depend wholly on the ability and judgment of the analysts, that we regret very much the omission. It

is stated, however, that these names are to be given in the several volumes as published, and that any subscriber is at liberty to withdraw his name at any time, if dissatisfied with the work. These conditions evince at least a confidence, on the part of the publisher, in the capacity of the professional gentlemen engaged to execute this extensive and laudable design. The entire library is to consist of about twenty volumes, which are to be issued on the following CONDITIONS:—

1. The work will be printed on good paper. The first volume to contain ancient, the second, modern authors.

2. A new type will be cast expressly for the work.

3. Plates will be given, when necessary to illustrate any part of the subject.

4. Each volume will contain double the quantity of matter to be found in the majority of medical books, to wit, upwards of five hundred (double column) large octavo pages, well bound in sheep. Price \$3 per volume, delivered to subscribers free of expense.

5. Two volumes will be delivered at one time. Payment to be made on delivery; after which, subscribers will be at liberty to withdraw their names, should they not approve of the work, provided notice of such intention be given to the publisher within one month from the time of delivery.

6. Care will be taken to have each volume complete within itself, and as a distinct work; so that the substance of every author whose production comes under consideration, will be preserved entire, and no portion left for a subsequent volume.

7. During the publication, a general summary, presenting in one view the practice pursued by the

most eminent physicians, in the diseases under consideration, will be given either at the end of each volume, or in a distinct volume at the conclusion, as may be deemed most advantageous to the profession.

8. The name of each gentleman engaged to write for the work, will be given with the respective author he is to analyse, being of undoubted competency to the task assigned.

LONDON COLLEGE OF PHYSICIANS.

At a late meeting of this College, Dr. Francis Hawkins read a letter from Sir Robert Ker Porter, addressed to the President of the College, on the subject of a medicinal plant growing wild in South America, and called the *guaco*; respecting the virtues attributed to which plant, Sir Robert had been at great pains to collect some facts and interesting information. It appears that there are native Indians and negroes in some parts of South America, who possess a wonderful power of handling the most venomous serpents with impunity. It has been ascertained that they owe their protection to the internal use and external application of the leaves and expressed juice of the *guaco*. The same means are also found effectual for the cure of the bites of serpents and other poisonous reptiles. It is further stated that the use of this plant is the best preservative from, and the only cure for, that most dreadful of diseases, *hydrophobia*. The plant has received its name from the manner in which its properties were discovered. A bird of the kite kind, a great destroyer of serpents, had been observed to attack them always with impunity, after feeding on this plant; the bird is called the serpent-falcon, or *guaco*, from the monotonous cry which it utters; and the plant has been named after the bird. It is a creeper plant, corymbiferous, grow-

ing in the hotter regions of the New World, along the sides of rivulets, and in well-shaded spots. Many other virtues are attributed to it; as, that it is a cure for rheumatism and consumption, and various other disorders. After making due allowance for some degree of exaggeration, and for the influence of superstition, it appears certain that it possesses some virtues as an antidote to animal poisons. On the table there were placed a bottle of the juice of the guaco, expressed in South America, as well as a dried flower, and a leaf from a plant, raised in this country in a hot-house, where it grows readily.—*London Lit. Gaz.*

Alimentary Tubercle of Van Dieman's Land.—A singular substance has been found at the depth of a foot or a foot and a half in the earth of that country. It has not yet been described, but is called *indigenous bread*. It is covered with a thin skin, has a rounded form, like a potatoe or yam, and is sometimes as large as a man's head. When cut, it appears as if composed of a solid spongy mass, containing a considerable quantity of alimentary matter. No root or fibre has been found adhering to it, so that sometimes it has been thought to be a sort of terrestrial polypus, possessing a principle of animal life. The only indication of its presence which the natives have, is the occurrence of an exceedingly small leaf, which rises from the earth, and is connected with it by very thin and delicate fibres, which break whenever the tubercle is raised.—*Asiatic Journal.*

Blindness from Palsy of the Optic Nerve.—Dr. Short, and Mr. Liston, of the Royal Infirmary of Edinburgh, have published two cases of this malady in which the endermic practice (of which we lately gave an account) fully succeeded. A small blister was applied to each temple, and one-fourth of a grain of strychnine applied to the surface, after the removal of the cuticle. The first patient was cured in six days; but, in the other case, the quantity of strychnine was gradually increased to three grains, before any good effect was evident. In consequence of its producing giddiness, headach, nausea, tremors of the arms, &c., it was discontinued for a few days.—*Gaz. of Health.*

Scabies.—In an obstinate case of this disease, attended with considerable erysipelatous inflammation, which occurred at the Royal Infirmary in Edinburgh, the practice of puncturing the part with the point of a lancet proved eminently successful. About six ounces of blood escaped from the punctures. The following day the inflammation had nearly disappeared; and, in the course of a week, the patient was discharged cured.—*Id.*

Croton Oil.—A considerable quantity of this article, which a few years ago was sold at 18s. an ounce, was lately sold at the Custom-house sale, England, at the rate of 6d. an ounce. In consequence of its present low price, it is now used as a purgative for horses.

WEEKLY REPORT OF DEATHS IN BOSTON, ENDING MAY 22.

| Date. | Sex. | Age. | Disease. | Date. | Sex. | Age. | Disease. |
|---------|------|--------|---------------------|-------|------|--------|---------------------------|
| May 15. | F. | 30 yrs | consumption | 17. | M. | 35 yrs | unknown |
| 16. | M. | 22 | fever and ague | 18. | M. | 33 | inflammation of the heart |
| | F. | 2 | unknown | | M. | 4 | croup |
| | F. | 42 | do. | 19. | F. | 12 | consumption |
| | M. | 12 | dropsy on the brain | 20. | M. | 20 mo | croup |
| | M. | 10 mo | do. | | F. | 19 | do. |
| | M. | 70 yrs | mortification | 21. | M. | 12 d | fits |
| | F. | 3 | lung fever | | F. | 22 yrs | consumption |
| | F. | 46 | consumption | 22. | M. | 37 | intemperance |

Males, 10.—Females, 8. Total, 18.

ADVERTISEMENT.

NEW MEDICAL WORKS.

JUST published, and for sale, by CARTER & HENDEE,—

A Treatise upon the Semeiology of the Eye, for the Use of Physicians; and of the Countenance, for Criminal Jurisprudence. By J. F. DANIEL LOBSTEIN, M.D.

A Treatise on Surgical and General Anatomy. By WILLIAM E. HORNER, M.D. In 2 vols. 2d edition, revised and corrected.

The American Dispensary; containing the Natural, Chemical, Pharmaceutical, and Modern History, of the different Substances employed in Medicine. Together with the Operations of Pharmacy, illustrated and explained according to the Principles of Modern Chemistry. To which are added Toxicological and other Tables; the Prescription for Patent Medicines, and various Miscellaneous Preparations. Eighth edition, improved and greatly enlarged, by JOHN REDMAN COXE, M.D.

May 25.

SUPERIOR STETHOSCOPE.

CARTER & HENDEE have constantly on hand, Stethoscopes of the most approved form, manufactured by George Wheelwright.

They also publish a Manual for the Use of the Stethoscope. A short Treatise on the different Methods of investigating the Diseases of the Chest. Translated from the French of M. Collin by W. N. Ryland, M.D., from the third London edition: with plates and an explanatory introduction, by a Fellow of the Massachusetts Medical Society.

April 6.

NEW MEDICAL BOOKS.

JUST published, and for sale, by CARTER & HENDEE,—Malaria; an Essay on the Production and Propagation of this Poison. By JOHN McCULLOCH, M.D. F.R.S., &c. &c.

An Essay on the Diseases of the Internal Ear. By I. A. SAISSY, M.D. Translated from the French, by NATHAN R. SMITH, M.D., Professor of Surgery in the University of Maryland; with a Supplement on Diseases of the External Ear, by the Translator.

Observations on the Utility and Administration of Purgative Medicines, in several Diseases. By JAMES HAMILTON, M.D., Fellow of the Royal College of Physicians, &c. &c. From the Fifth Edinburgh Edition.

VACCINE VIRUS.

NATHAN JARVIS, on account of frequent solicitations, will constantly keep for sale FRESH VACCINE VIRUS, taken by a physician from healthy subjects. It will be furnished at a reasonable price on demand, either in scabs or quills. Physicians in the country who are in want of Virus, can send their orders by mail, as it can be enclosed in a letter and transmitted without any great expense of postage. June 1.

*Apothecaries' Hall,
No. 188 Washington Street.*

TO PHYSICIANS.

THE BOSTON MEDICAL AND SURGICAL JOURNAL is issued every week from the press of JOHN COTTON, No. 184 WASHINGTON STREET, BOSTON.

It contains sketches of such of the contents of Foreign and Domestic Periodicals, as are of *immediate practical value* to the Physician and Surgeon;—original communications from the Faculty in different parts of the country; and, under the Boston Head, such editorial matters as may be deemed interesting or useful, by way of essay or intelligence.

The Journal is furnished to subscribers for \$3.50 per annum. If paid in advance, or within three months from the commencement of the year, the price is \$3.00. If not paid till after the close of the year, \$4 will be required.

MEDICAL PERIODICALS.

JUST received, by CARTER & HENDEE,—

The New York Medical Inquirer, and Domestic Magazine, Vol. 1, No. 5. For May, 1830.

The North American Medical and Surgical Journal. Published under the Auspices of the Knappa Lambda Association of the United States.—No. 18. For April, 1830. May. 18.

Published weekly, by JOHN COTTON, at 184, Washington St. corner of Franklin St., to whom all communications must be addressed, *postpaid*.—Price three dollars per annum, if paid in advance, three dollars and a half if not paid within three months, and four dollars if not paid within the year. The postage for this is the same as for other newspapers.